ABB BALDOR RELIANCE

Customer information packet

CDRX40144T

100HP, 1785RPM, 3PH, 60HZ, 405TC, TEFC, F1
Class - CLI GP C,D
Division - Division I

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11/16/2026 6:19:33 AM

Specifications

Enclosure	TEFC
Frame	405TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	UL
	CSA
	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	6-60
Current @ Voltage	112.000 A @ 460.0 V
	224.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	112.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0692
Layout	617428-725
Eff. date	10-22-2021
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	05-22-2019

IP Rating	NONE
KVA Code	G
Max Speed	3600 rpm
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.22 IN
Power Factor	87
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

NP2496L
MOBIL POLYREX EM

000613006PC			
CLASS I GROUP	C D X	**NO.**	
CLASS II GROUP	X X X		
OPERATING TEMP CODE	T3C		

NP3140L											
SPEC NO.	A40-7258-0692			**CAT.NO.**	CDRX40144T				**FRAME**	405TC	
HP	100	**VOLTS**	230/460		**PHASE**	3	**DESIGN**	B	**TYPE**	P	
RPM	1785	**AMPS**	224/112		**HZ**	60	**AMB**	40	**SF**	1.00	
DRIVE END BEARING	80BC03J30X			**DUTY**	CONT				**INSUL.CLASS**	F	
OPP D.E. BEARING	80BC03J30X			**ENCL**	TEFC	**CODE**	G				
SF	1.15	**WK2**	26.346	**MAG CUR**	28.6				**RPM MAX**	3600	
CT HZ	6-60	**VT HZ**	0-60	**CHP HZ**	60-90				**NEMA-NOM-EFF**	95.4	
	SUIT FOR 55C AMB AT 1.00 SF						IP55				
SER.NO.					**MOTOR WEIGHT**	1467					

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405HPZ	100	P	3/60	1785	230/460

AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
224/112	CONT	40/F	1.00	B	G	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C OHMS (BETWEEN LINES)
596956	418142-33RE	---	---	.0123/.0492

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	28.6	1800	5.49	0
1/4	25.0	39.2	1796	64.3	93.0
2/4	50.0	59.5	1792	82.5	95.4
3/4	75.0	84.6	1788	86.7	95.7
4/4	100	112	1783	87.4	95.4
5/4	125	141	1778	87.3	94.9

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	151	445	725
PULL UP	360	136	400	706
BREAKDOWN	1721	250	735	382
FULL LOAD	1783	100	295	112

AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

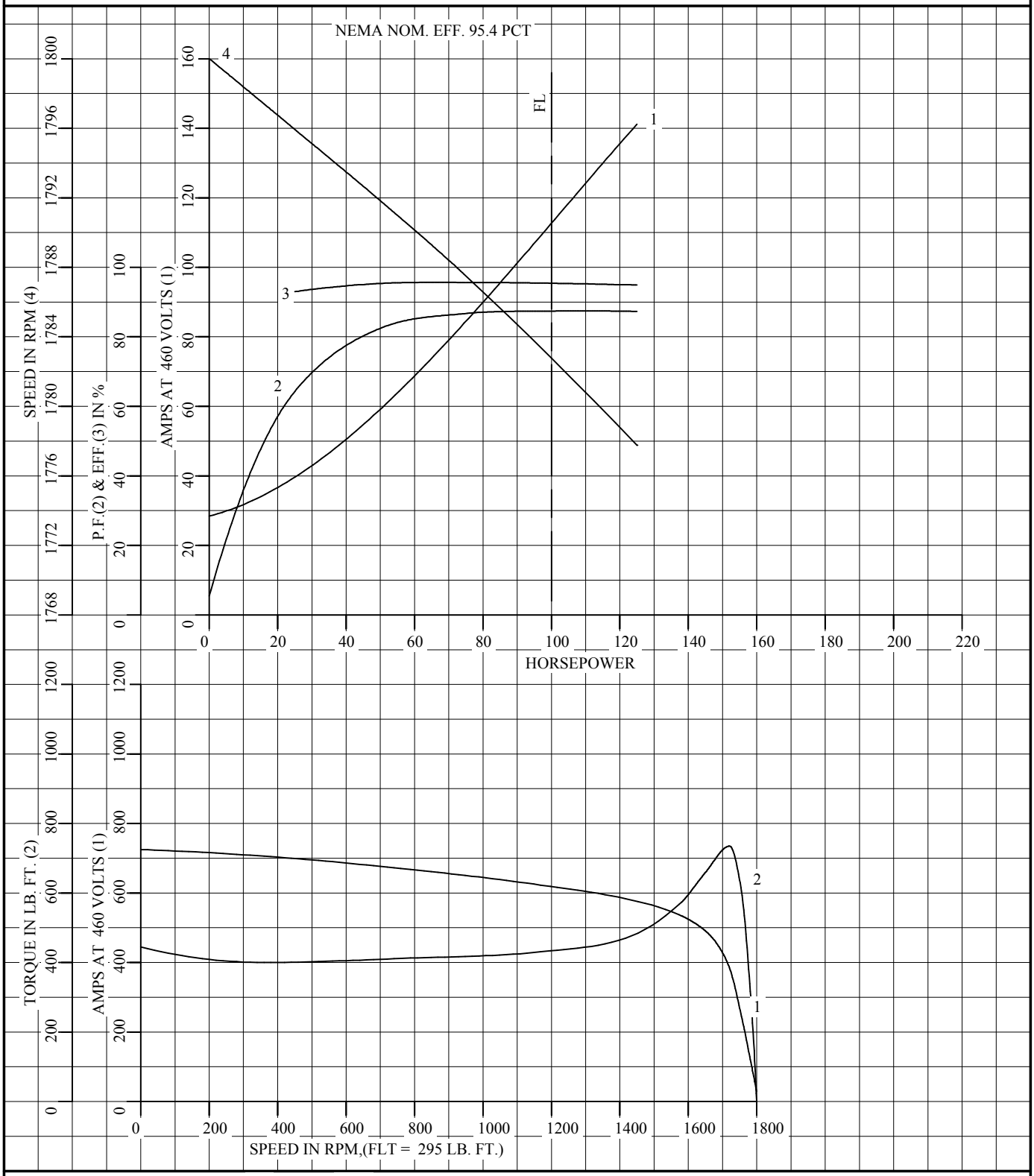
REMARKS: TYPICAL DATA
NEMA NOM. EFF. 95.4 PCT

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY G. R. WEBB
CK. BY W. L. SMITH
APP. BY E.J.CHRISTIAN
DATE 09/29/15

A-C MOTOR PERFORMANCE DATA A40WG0692-R016
ISSUE DATE 11/07/19

REL S.O.	RPM 1785	S.F. 1.00	ROTOR 418142-33RE
FRAME 405HPZ	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 100	AMPS 224/112	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES.@ 25 °C .0123/.0492
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 596956	OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
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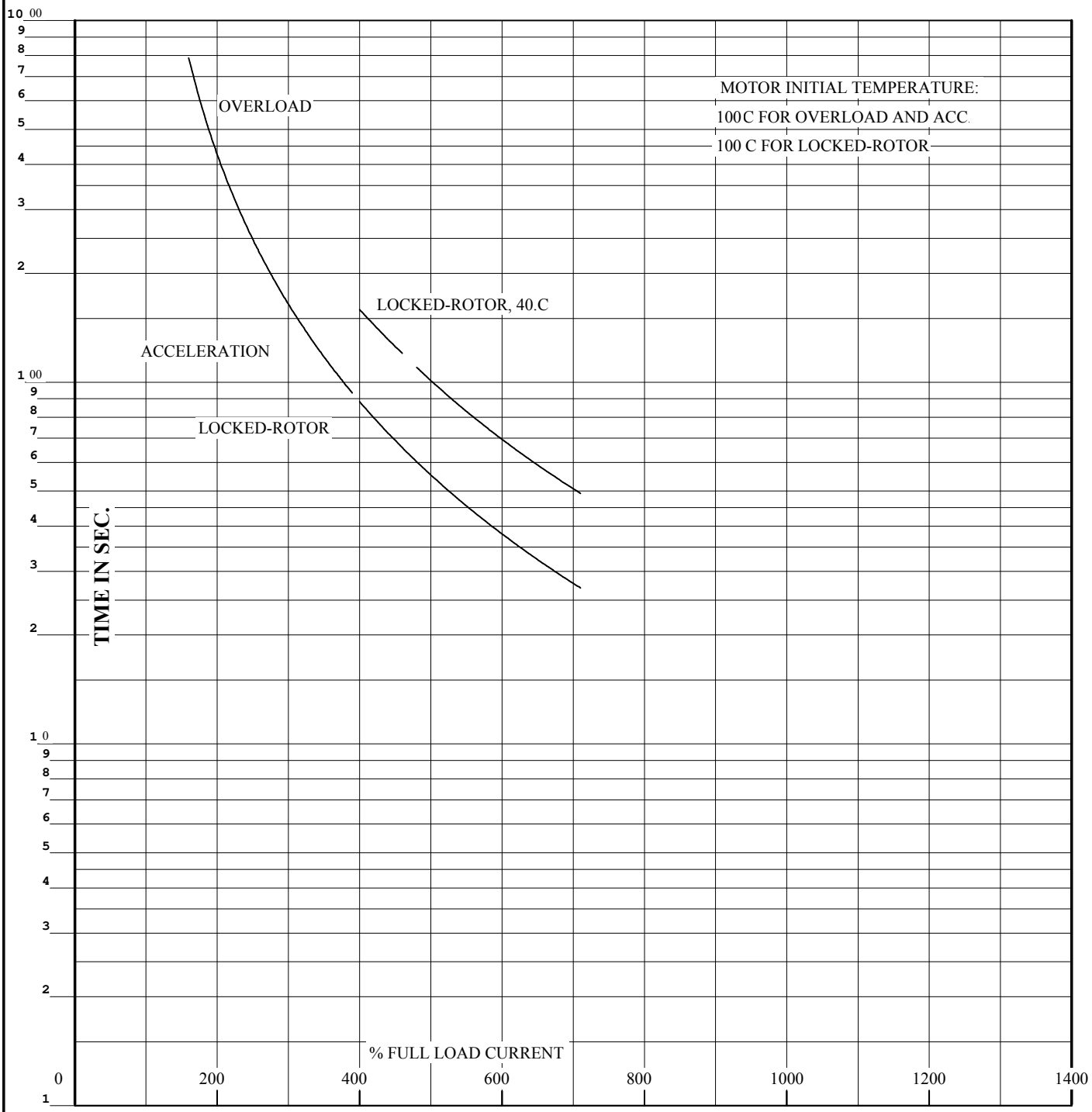
DR. BY	G. R. WEBB
CK. BY	W. L. SMITH
APP. BY	E.J.CHRISTIAN
DATE	09/29/15

A-C MOTOR PERFORMANCE CURVES

A40WG0692-R016

ISSUE DATE 11/07/19

REL. S.O.	RPM 1785	S.F. 1.00	ROTOR 418142-33RE
FRAME 405HPZ	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 100	AMPS 224/112	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES.@ 25 °C.0123/.0492
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 596956	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: NEMA NOM. EFF. 95.4 PCT

AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR A MEMBER OF THE ABB GROUP

DR. BY	G. R. WEBB
CK. BY	W. L. SMITH
APP. BY	E.J.CHRISTIAN
DATE	09/29/15

A-C MOTOR PERFORMANCE CURVES

A40WG0692-R016

ISSUE DATE 11/07/19

DUTY MASTER ALTERNATING CURRENT MOTORS

617428-725

ENCLOSURE: UNDERWRITERS LISTED

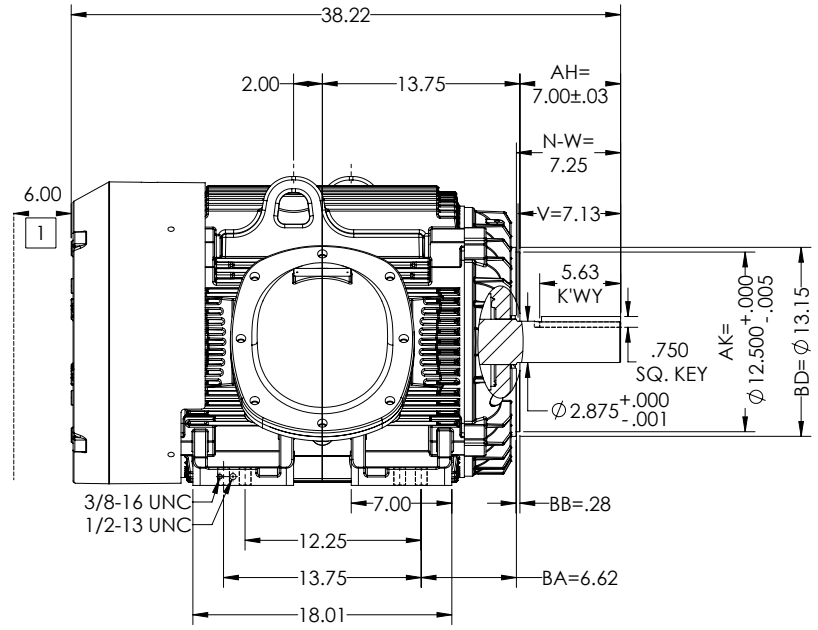
SQUIRREL-CAGE INDUCTION

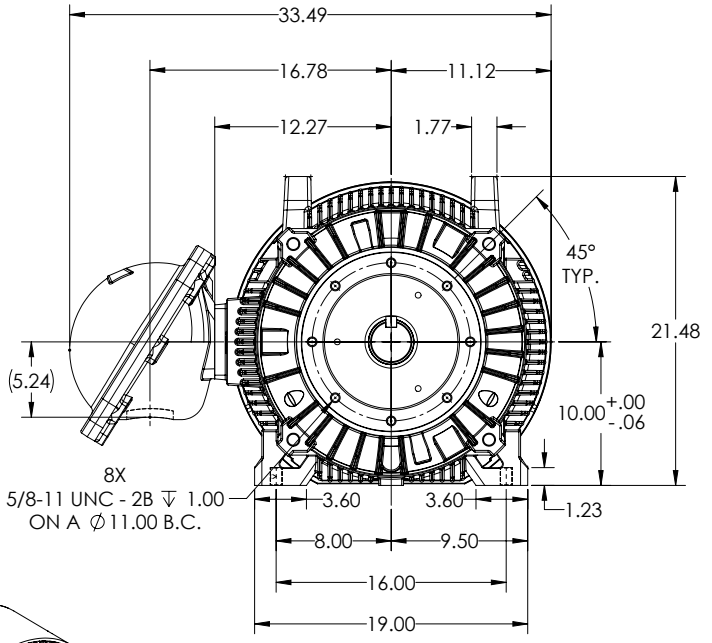
MOUNTING: FOOT, F-1

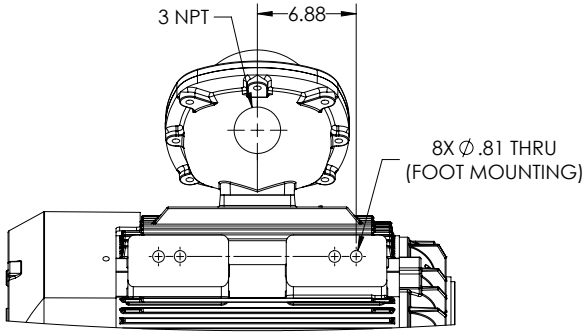
G405T/G404T FRAME MOUNTING HOLES

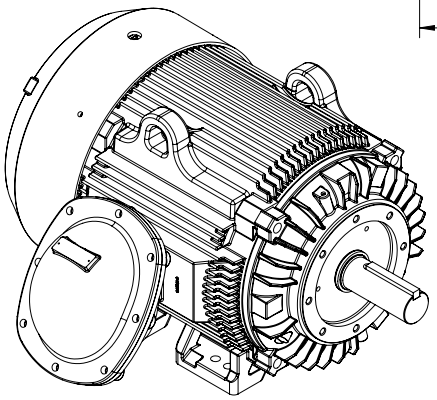
COOLING: FAN COOLED

GROUP C & D









1 OBSTRUCTION MUST NOT ENCROACH ON AIR INLET.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
WEIGHT (LBS): 1400, MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R.

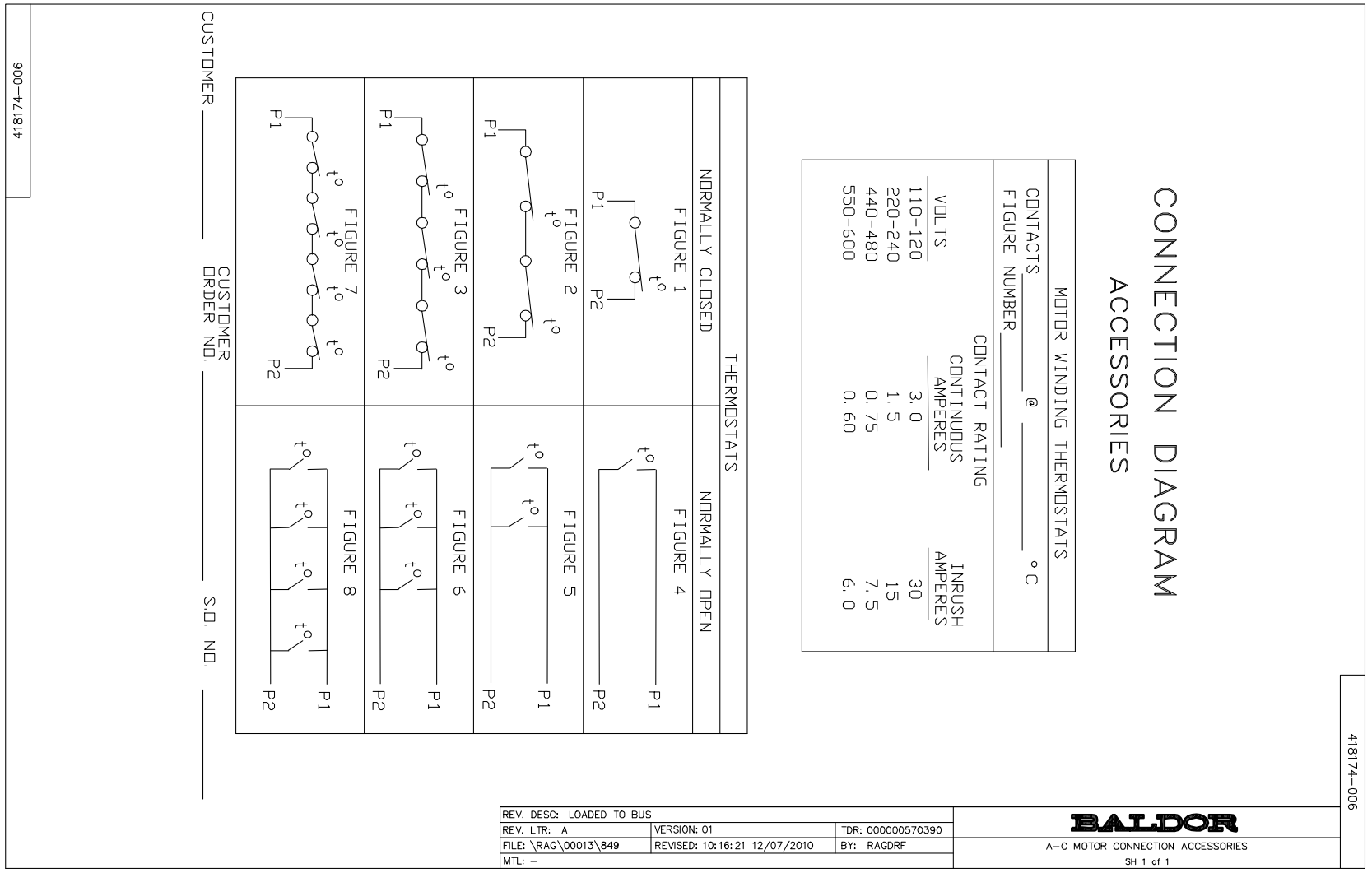
DIMENSIONS ARE IN INCHES.
MAX FACE RUNOUT & ECCENTRICITY = .007 T.I.R.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER 1 OF 1	REV. DESC: NEW DRAWING		
617428-725	REV: - VERSION: 00	REVISED: 09:51:05 05/22/2019	TDR: 000001109207
	MODEL NO. 617428-725		REF:
	BY: USJEDIL	Material:	C

BALDOR

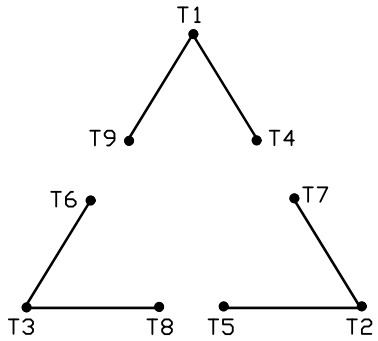
G405/404TC XP TEFC F1 FOOT CAST IRON CONDUIT BOX/GROUP C&D

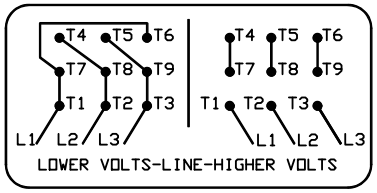
617428-725


CONNECTION DIAGRAM
ACCESSORIES
MOTOR WINDING THERMOSTATS
CONTACTS @ °C
FIGURE NUMBER
CONTACT RATING
VOLTS
CONTINUOUS AMPERES
INRUSH AMPERES
110-120 3.0 30
220-240 1.5 15
440-480 0.75 7.5
550-600 0.60 6.0
418174-006
THERMOSTATS
NORMALLY CLOSED
NORMALLY OPEN
FIGURE 1
FIGURE 2
FIGURE 3
FIGURE 4
FIGURE 5
FIGURE 6
FIGURE 7
FIGURE 8
P1
P2
418174-006
CUSTOMER
CUSTOMER ORDER NO.
S.O. NO.
REV. DESC: LOADED TO BUS
REV. LTR: A
VERSION: 01
TDR: 000000570390
FILE: \RAG\00013\849
REVISED: 10:16:21 12/07/2010
BY: RAGDRF
MTL: -
BALDOR
A-C MOTOR CONNECTION ACCESSORIES
SH 1 of 1

416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED





(N. P. 1575-B)

REV. DESC: ADJUST TEXT DARKNESS		
REV. LTR: B	VERSION: 02	TDR: 000001285318
FILE: \RAG\00022\453	REVISED: 09:36:26 09/24/2026	BY: USJOSUL
MTL: -		

ABB

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH1 of 1

416820-002